Designation: E1671 – 95a (Reapproved 2012)

Standard Classification for Serviceability of an Office Facility for Cleanliness^{1,2}

This standard is issued under the fixed designation E1671; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

- 1.1 This classification covers pairs of scales for classifying an aspect of the serviceability of an office facility, that is, the capability of an office facility to meet certain possible requirements for cleanliness.
- 1.2 Within that aspect of serviceability, each pair of scales, shown in Figs. 1-5, are for classifying one topic of serviceability. Each paragraph in an Occupant Requirement Scale (see Figs. 1-5) summarizes one level of serviceability on that topic, which occupants might require. The matching entry in the Facility Rating Scale (see Figs. 1-5) is a translation of the requirement into a description of certain features of a facility which, taken in combination, indicate that the facility is likely to meet that level of required serviceability.
- 1.3 The entries in the Facility Rating Scale (see Figs. 1-5) are indicative and not comprehensive. They are for quick scanning and rating a facility and not for evaluating or diagnosing it.
- 1.4 This classification can be used to estimate the level of serviceability of an existing facility. It can also be used to estimate the serviceability of a facility that has been planned but not yet built, such as one for which single-line drawings and outline specifications have been prepared.
- 1.5 This classification indicates what would cause a facility to be rated at a certain level of serviceability but does not state how to conduct a serviceability rating nor how to assign a serviceability score. That information is found in Practice E1334. The scales in this classification are complimentary to and compatible with Practice E1334. Each requires the other.

2. Referenced Documents

2.1 ASTM Standards:³

E631 Terminology of Building Constructions

E1334 Practice for Rating the Serviceability of a Building or Building-Related Facility

E1679 Practice for Setting the Requirements for the Serviceability of a Building or Building-Related Facility

2.2 ISO Document:⁴

ISO 6240 International Standard, Performance Standards in Building—Contents and Presentation

3. Terminology

- 3.1 Definitions:
- 3.1.1 *facility*—a physical setting used to serve a specific purpose. **E631**
- 3.1.1.1 *Discussion*—A facility may be within a building, a whole building, or a building with its site and surrounding environment; or it may be a construction that is not a building. The term encompasses both the physical object and its use.
- 3.1.2 facility serviceability—the capability of a facility to perform the function(s) for which it is designed, used, or required to be used. **E631**
- 3.1.2.1 *Discussion*—The scope of this performance is of the facility as a system, including its subsystems, components and materials and their interactions, such as acoustical, hydrothermal, air purity, and economic; and of the relative importance of each performance requirement.
- 3.1.3 *office*—a place, such as a room, suite, or building, in which business, clerical or professional activities are conducted. **E631**
- 3.1.4 For standard definitions of additional terms applicable to this classification, see Terminology E631.

¹ This classification is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.25 on Whole Buildings and Facilities.

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² Portions of this document are based on material originally prepared by the International Centre for Facilities (ICF) and © 1993 by ICF and Minister of Public Works and Government Services Canada. Their cooperation in the development of this standard is acknowledged.

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

⁴ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.

Scale B.4.1. Exterior and public areas

	Facility Management Requirement Scale		Facility Rating Scale				
9	O LEVEL OF CLEANLINESS FOR BUILDING EXTERIOR AND SITE: The building site, exterior, and interior public spaces need to be very clean and tidy at all times. The site must have a consistently well maintained look.	8	9	O <u>Site</u> : The site or street(s) are clean, with trash receptacles convenient to all pedestrian routes and waiting areas. Paved surfaces are in as-new condition. The exterior furniture has a looked after appearance, e.g. flagpole(s), seating, signs. O <u>Building</u> : The building exterior is very clean, fresh-looking. Glazing and window frames are kept very clean at all times. If a historic building, any cleaning is directed by conservation experts and has been expertly cleaned. O <u>Interior public spaces</u> : All interior public spaces and surfaces are sparkling clean, with no visible dents or defects. O <u>Fittings</u> , <u>fixtures and furniture</u> : All fittings, fixtures and furniture are in sparkling clean condition.			
7	O LEVEL OF CLEANLINESS FOR BUILDING EXTERIOR AND SITE: The building site, exterior, and interior public spaces need to be consistently clean and tidy, with clean windows and accessible trash receptacles. The cleaning cycle must be frequent enough to maintain this throughout the day.	6	7	O <u>Site</u> : The site or street(s) is tidy and clean with trash receptacles strategically placed. O <u>Building</u> : The building exterior is uniformly clean. The walls are free of loose dirt and graffiti. Glazing is cleaned twice per year, or more frequently. The site is acceptably clean at all times. O <u>Interior public spaces</u> : Interior public spaces and surfaces are uniformly clean. O <u>Fittings</u> , <u>fixtures and furniture</u> : Fittings, fixtures and furniture are uniformly clean.			
5	O LEVEL OF CLEANLINESS FOR BUILDING EXTERIOR AND SITE: The building site, exterior, and interior public spaces need to have an average level of cleanliness and tidiness.	4	5	 <u>Site</u>: The site or street(s) is fairly tidy, with minimal litter or graffiti. <u>Building</u>: The building exterior is fairly clean. The exterior walls are mostly free of loose dirt. There are some stains, and minimal graffiti. Glazing and window frames are dirty about halfway through each cleaning period, e.g. visibility is slightly affected and, in some lighting conditions, the dirt is noticeable. <u>Interior public spaces</u>: Interior public spaces are generally clean. A few surfaces need additional cleaning, e.g. entrances, vestibules, lobby, elevator cabs, corridors on upper levels. <u>Fittings, fixtures and furniture</u>: Fittings and fixtures are generally clean. Some items need additional cleaning, e.g. entrance doors, metal surfaces, furniture, signs, blinds, lights. 			
3	O LEVEL OF CLEANLINESS FOR BUILDING EXTERIOR AND SITE: The building site, exterior, and interior public spaces can have a low level of upkeep and cleanliness, whether to conform with the neighbourhood, or to present a cost-conscious appearance to the public.	2	3	O <u>Site</u> : The site or street(s) is messy, with some litter. O <u>Building</u> : The building exterior is generally dirty. Exterior walls have some loose dirt and graffiti. Glazing and window frames are very dirty about halfway through each cleaning period, e.g. visibility and lighting are affected, and inside and outside surfaces are smudgy in appearance. O <u>Interior public spaces</u> : Interior public spaces are dirty in some places, or do not appear to have been cleaned recently. Most surfaces need spring cleaning. O <u>Fittings</u> , <u>fixtures and furniture</u> : Some fittings and fixtures are dirty or smudgy and need cleaning, e.g. doors, lights, interior glazing, handrails, elevator cabs, etc. Furniture and blinds need cleaning.			

Scale B.4.1. continued on next page

FIG. 1 Scale B.4.1 for Exterior and Public Areas

Scale B.4.1. Exterior and public areas (continued)

Facility Management Requirement Scale

O LEVEL OF CLEANLINESS FOR BUILDING EXTERIOR AND SITE: Cleanliness of the building site and exterior is not important; the building is located in an area where exterior image is not important; the nature of the operation is such that a poor image is desirable; budget limitations restrict spending; need to be close to clients, no matter what the location.

Facility Rating Scale

- 1 O Site: The site or street(s) is dirty, with much litter.
- O <u>Building</u>: The building exterior is very dirty. Exterior walls have much loose dirt and graffiti. Glazing and window frames are extremely dirty about halfway through each cleaning period, e.g. visibility and lighting are seriously affected, and inside and outside surfaces are dusty, streaked, and grimy.
 - O <u>Interior public spaces</u>: Interior public spaces are dingy and dirty, with some graffiti. There is loose dirt and ingrained dirt or stains on many surfaces, and surfaces need cleaning.
 - O <u>Fittings, fixtures and furniture</u>: All or most fittings and fixtures are very dirty, e.g. doors, lights, interior glazing, handrails, elevator cabs, etc. Furniture and blinds, etc., are stained or dirty, and need cleaning.

□ Exceptionally important. □ Important. □ Minor Importance.									
Minimum <u>T</u> hreshold level =	□NA □NR □Zero □DP								

NOTES Space for handwritten notes on Requirements or Ratings

FIG. 1 Scale B.4.1 for Exterior and Public Areas (continued)

4. Significance and Use

- 4.1 Each Facility Rating Scale (see Figs. 1-5) in this classification provides a means to estimate the level of service-ability of a building or facility for one topic of serviceability and to compare that level against the level of any other building or facility.
- 4.2 This classification can be used for comparing how well different buildings or facilities meet a particular requirement for serviceability. It is applicable despite differences such as location, structure, mechanical systems, age, and building shape.
 - 4.3 This classification can be used to estimate the following:
- 4.3.1 Serviceability of an existing facility for uses other than its present use.
- 4.3.2 Serviceability (potential) of a facility that has been planned but not yet built.
- 4.3.3 Serviceability (potential) of a facility for which remodeling has been planned.
- 4.4 Use of this classification does not result in building evaluation or diagnosis. Building evaluation or diagnosis generally requires a special expertise in building engineering or technology and the use of instruments, tools, or measurements.

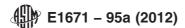
- 4.5 This classification applies only to facilities that are building constructions, or parts thereof. (While this classification may be useful in rating the serviceability of facilities that are not building constructions, such facilities are outside the scope of this classification.)
- 4.6 This classification is not intended for, and is not suitable for, use for regulatory purposes nor for fire hazard assessment nor for fire risk assessment.

5. Basis of Classification

- 5.1 The scales in Figs. 1-5 contain the basis for classification.
- 5.2 Instructions for use of this classification are contained in Practices E1334 and E1679.

6. Keywords

6.1 building; cleanliness, in office buildings; facility; facility occupants; function; office; performance; rating; rating scale; requirements; serviceability; toilets and washrooms, cleanliness of; waste disposal, from office buildings



Scale B.4.2. Office areas (interior)

	Facility Management Requirement Scale			Facility Rating Scale
9	O LEVEL OF CLEANLINESS OF THE BUILDING INTERIOR: Require that the interior of the building, and fittings and fixtures, are and appear to be extremely 'sparkling' clean at all times.	8	9	O <u>Building surfaces</u> : Building interior surfaces are sparkling clean. O <u>Fittings, fixtures and furniture</u> : Fixtures and fittings are sparkling clean and undamaged.
7	O LEVEL OF CLEANLINESS OF THE BUILDING INTERIOR: Require that the interior of the building be very clean at all times. Fittings and fixtures should be clean, with special care needed for some.	6	7	O <u>Building surfaces</u> : Building interior surfaces are uniformly clean. O <u>Fittings, fixtures and furniture</u> : Fixtures and fittings are uniformly clean and undamaged. A few items need additional or more frequent cleaning or repair, e.g. lights, doors, signs, blinds.
5	O LEVEL OF CLEANLINESS OF THE BUILDING INTERIOR: An average level of cleanliness is needed for building interior surfaces, fittings and fixtures. Some items may require additional or more frequent cleaning or repair.	4	5	O <u>Building surfaces</u> : Building interior surfaces are generally clean. O <u>Fittings, fixtures and furniture</u> : Fixtures and fittings are generally clean and undamaged. A few items need additional or more frequent cleaning or repair, e.g. lights, doors, signs, blinds.
3	O LEVEL OF CLEANLINESS OF THE BUILDING INTERIOR: A low level of cleanliness can be tolerated, with building interior surfaces, fittings, and fixtures appearing dirty or dusty and in need of cleaning.	2	3	O <u>Building surfaces</u> : Some building interior surfaces are dirty or dingy or stained, and need a thorough spring cleaning, e.g. wall finishes, floor coverings, ceilings, glazing. O <u>Fittings, fixtures and furniture</u> : Some fixtures are dirty or dusty, and need cleaning, e.g. lights, doors, door handles, signs. Fittings mostly need cleaning, e.g. drapes, blinds.
1	O LEVEL OF CLEANLINESS OF THE BUILDING INTERIOR: Cleanliness of interior surfaces, fittings, and fixtures is either completely irrelevant or completely unimportant to occupants.		1	O <u>Building surfaces</u> : All, or most, building interior surfaces are dirty or dingy or stained, and need a thorough spring cleaning, e.g. wall finishes, floor coverings, ceilings, glazing. O <u>Fittings, fixtures and furniture</u> : Most fixtures and fittings are dirty or dusty, and need cleaning, e.g. lights, doors, door handles, signs, drapes, blinds.
<u> </u>	xceptionally important. Important.	<u> M</u> i	nor I	mportance.

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Minimum $\underline{\mathbf{T}}$ hreshold level =

 \Box NA

FIG. 2 Scale B.4.2 for Office Areas (Interior)

□NR □Zero □DP

Scale B.4.3. Toilets and washrooms

	Facility Management Requirement Scale			Facility Rating Scale			
9	O MAINTAINED CONDITION OF TOILETS AND WASHROOMS: High public profile and/or many visitors requires that toilets and washrooms and other amenities be sparkling clean, well supplied, and tidy.	8	9	O <u>Toilets and washrooms</u> : Toilets, washrooms and fixtures are sparkling clean. Waste containers are never overfilled. The air smells fresh. Supplies are always replenished. Fixtures and surfaces are in as-new appearance. O <u>Other amenities</u> : Where provided, other amenities for occupants are sparkling clean and in as-new condition.			
7 □	O MAINTAINED CONDITION OF TOILETS AND WASHROOMS: Toilets and washrooms and other amenities need to be very clean, well stocked with supplies, and tidy.	6	7	O <u>Toilets and washrooms</u> : Toilets, washrooms and fixtures are clean and sanitized. Waste containers are occasionally overfilled. There are no strong odours. Supplies are always replenished. O <u>Other amenities</u> : Where provided, other amenities for occupants are very clean.			
5	O MAINTAINED CONDITION OF TOILETS AND WASHROOMS: Toilets and washrooms and other amenities need to have an average level of cleanliness, be well stocked with supplies, (e.g. soap dispensers and paper towels) and be generally tidy.	4	5	O <u>Toilets and washrooms</u> : Toilets, washrooms and fixtures are generally clean and sanitized. Waste containers are sometimes filled. There are some odours. Supplies are always replenished. <u>Other amenities</u> : Where provided, other amenities for occupants are generally clean. Some additional cleaning is needed in some areas, e.g. lounge for occupants, day care facility, fitness facility, showers, etc.			
3	O MAINTAINED CONDITION OF TOILETS AND WASHROOMS: Condition of toilets and washrooms or other amenities can be below average. There are no visitors to the facility, or a below average image is acceptable.	2	3	O <u>Toilets and washrooms</u> : Toilet and washroom walls, floors, furnishings, equipment and fixtures are not uniformly clean. There are occasional strong odours. Supplies are not always replenished or spare supplies litter the washrooms. Waste containers are frequently filled. Some surfaces and fixtures need cleaning. O <u>Other amenities</u> : Where provided, other amenities need cleaning or dusting, e.g. lounge for occupants.			
1	O MAINTAINED CONDITION OF TOILETS AND WASHROOMS: Condition of toilets and washrooms or other amenities can be very poor. There are no visitors to the facility, and staff are seldom present.		1	O <u>Toilets and washrooms</u> : Toilets and washrooms are dirty and untidy. There are strong odours. One or more fixtures have blocked or overflowed recently. Most dispensers are empty or inoperative and supplies are seldom replenished, or spare supplies litter the washrooms. Waste containers have overflowed with much paper on the floor. There is graffiti. Many surfaces and fixtures need cleaning. O <u>Other amenities</u> : Where provided, other amenities are very dirty and need cleaning, e.g. lounge for occupants.			
⊔ <u>E</u> :	\square Exceptionally important. \square Important. \square Minor Importance.						

NOTES Space for handwritten notes on Requirements or Ratings

Minimum $\underline{\mathbf{T}}$ hreshold level =

FIG. 3 Scale B.4.3 for Toilets and Washrooms

□NA □NR □Zero □DP

Scale B.4.4. Special cleaning

Facility Management Requirement Scale				Facility Rating Scale		
9	O LEVEL OF CLEANLINESS IN SPECIAL FACILITIES: Special facilities such as cafeteria, computer centre and secure area must have an exceptional level of cleanliness.	8	9	 ○ Food facilities: Food facilities are sparkling clean. ○ Computer centre: The computer room is sparkling clean, with no evidence of accumulated dust or waste. ○ Secure area: The secure area is sparkling clean. 		
7	O LEVEL OF CLEANLINESS IN SPECIAL FACILITIES: Special facilities such as cafeteria, computer centre and secure area must have an above average level of cleanliness, with no waste in evidence.	6	7	 <u>Food facilities</u>: Food facilities are very clean. <u>Computer centre</u>: The computer room is very clean, with no evidence of accumulated paper waste or printer dust. All surfaces and equipment are expertly cleaned. <u>Secure area</u>: The secure area is very clean. 		
5	O LEVEL OF CLEANLINESS IN SPECIAL FACILITIES: Cafeteria and secure area need to be uniformly clean. Waste in the computer room needs to be neatly contained.	4	5	O <u>Food facilities</u> : Food facilities are uniformly clean. O <u>Computer centre</u> : The computer room is uniformly clean, and paper waste does not overflow waste containers. There is little evidence of printer dust. Most surfaces or equipment are carefully cleaned. O <u>Secure area</u> : The secure area is uniformly clean.		
3	O LEVEL OF CLEANLINESS IN SPECIAL FACILITIES: The condition of any special facilities such as cafeteria, computer centre or secure area is not a concern.	2	3	O <u>Food facilities</u> : Food facilities are not uniformly clean. Surfaces and equipment need cleaning. O <u>Computer centre</u> : The computer room is not uniformly clean. Some surfaces or equipment need more careful cleaning. O <u>Secure area</u> : The secure area is not clean. Some surfaces and fixtures need to be spring cleaned.		
1	O LEVEL OF CLEANLINESS IN SPECIAL FACILITIES: The occupant requires no special facilities that need cleaning, e.g. no cafeteria, computer centre or secure area.		1	O <u>Food facilities</u> : Food facilities have failed food cleanliness inspection. Surfaces are greasy and all need cleaning. There are strong odours. O <u>Computer centre</u> : The computer room is dusty and untidy. Equipment is visibly dusty. The whole facility needs careful and expert cleaning. O <u>Secure area</u> : The secure area is dirty. All or most surfaces and fixtures need to be spring cleaned.		
□ Exceptionally important. □ Important. □ Minor Importance.						

NOTES Space for handwritten notes on Requirements or Ratings

 $\underline{\mathbf{T}}$ hreshold level =

FIG. 4 Scale B.4.4 for Special Cleaning

□NA □NR □Zero □DP

Scale B.4.5. Waste disposal for building

Facility Management Requirement Scale			Facility Rating Scale		
9	O LOCATION FOR WASTE CONTAINERS: A high public profile requires that waste be concealed from view of visitors, and held in clean, ventilated, sanitary space. O REQUIREMENTS FOR WASTE HANDLING: Kitchen waste needs to be kept refrigerated, separate from other garbage. There needs to be a garbage compactor. O RECYCLING PROGRAM: There needs to be a recycling program.	8	9	O <u>Office waste</u> : Stored waste is hidden from view, and held in clean, ventilated, sanitary space. O <u>Kitchen waste</u> : Kitchen waste is held in separate space from other garbage, and is refrigerated. O <u>Garbage compactor</u> : An automatic garbage compactor is provided, connected to a garbage chute or accumulator bin. O <u>Recycling program</u> : A complete recycling program is in operation for all categories of waste. The holding area is clean and sorting is convenient.	
7	O LOCATION FOR WASTE CONTAINERS: Waste containers need to be out of sight. O REQUIREMENTS FOR WASTE HANDLING: Wet kitchen waste needs to be refrigerated in hot weather to avoid odours. There needs to be a garbage compactor. O RECYCLING PROGRAM: There needs to be a recycling program.	6	7	O <u>Office waste</u> : Stored waste is hidden from view, and held in clean space. O <u>Kitchen waste</u> : Wet kitchen waste is disposed of partly through the sewage system and partly removed in separate containers kept in refrigerated space during hot weather. O <u>Garbage compactor</u> : A basic garbage compactor is provided which must be loaded manually. O <u>Recycling program</u> : A partial recycling program is in operation for some categories of waste. There is a limited holding area for only a few categories of sorted waste.	
5	O LOCATION FOR WASTE CONTAINERS: Waste containers need to be out of sight. O REQUIREMENTS FOR WASTE HANDLING: A garbage compactor is not needed. O RECYCLING PROGRAM: A recycling program is not essential.	4	5	 O Office waste: Stored waste is hidden from view, and held in clean space. O Kitchen waste: Wet kitchen waste is stored with other waste in separate containers. O Garbage compactor: No garbage compactor is provided, but space is available. O Recycling program: A limited recycling program is in operation, but there is no space for holding sorted waste, so sorting must be done at the time of pickup, or off-site. 	
3	O LOCATION FOR WASTE CONTAINERS: Waste containers need to be enclosed but can be visible. O REQUIREMENTS FOR WASTE HANDLING: Waste disposal is of minimal concern O RECYCLING PROGRAM: A recycling program is not essential.	2	3	O <u>Office waste</u> : Waste containers are enclosed but can be seen by persons entering and leaving the building. O <u>Kitchen waste</u> : Wet kitchen waste is combined with dry waste. There are some odours. O <u>Garbage compactor</u> : No garbage compactor is provided, and could only be installed in a section of the loading dock area causing serious congestion or inconvenience. O <u>Recycling program</u> : No recycling program is in operation.	

Scale B.4.5 continued on next page

FIG. 5 Scale B.4.5 for Waste Disposal for Building

Scale B.4.5 Waste disposal for building (continued)

Facility Management Requirement Scale

O REQUIREMENTS FOR WASTE
 HANDLING: The method of waste disposal is either completely irrelevant or completely unimportant to occupants.

Facility Rating Scale

- O <u>Office waste</u>: Open waste containers are overflowing and exposed to view. They are located near the entrance used by staff or visitors.
 - O <u>Kitchen waste</u>: Wet kitchen waste is combined with dry waste. There are strong odours.
 - O <u>Garbage compactor</u>: No garbage compactor is provided, and no space is available.
 - O <u>Recycling program</u>: No recycling program is in operation.

□ Exceptionally important. □ Important. □ Minor Importance.									
Minimum <u>T</u> hreshold level =	□NA	□NR	□ Zero	☐ DP					

NOTES Space for handwritten notes on Requirements or Ratings

FIG. 5 Scale B.4.5 for Waste Disposal for Building (continued)

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